

**To:** Shoven, Heather[shoven.heather@epa.gov]  
**From:** Porter, Andrea  
**Sent:** Mon 11/2/2015 5:01:32 PM  
**Subject:** FW: Lead levels and Chloramine

fyi

**From:** Deltoral, Miguel  
**Sent:** Tuesday, April 07, 2015 8:11 AM  
**To:** Crooks, Jennifer  
**Cc:** Porter, Andrea; Pressman, Jonathan; Wahman, David; Triantafyllidou, Simoni; Lytle, Darren; Poy, Thomas; Bair, Rita; Schock, Michael  
**Subject:** Re: Lead levels and Chloramine

Hi Jen,

# Ex. 5 - Deliberative Process

Miguel A. Del Toral

Regulations Manager  
U.S. EPA R5 GWDWB  
77 West Jackson Blvd, (WG-15J)  
Chicago, IL 60604  
Phone: (312) 886-5253

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**From:** Crooks, Jennifer

**Sent:** Monday, April 6, 2015 01:47 PM  
**To:** Deltoral, Miguel  
**Cc:** Porter, Andrea  
**Subject:** RE: Lead levels and Chloramine

## Ex. 5 - Deliberative Process

Jen

**From:** Deltoral, Miguel  
**Sent:** Friday, April 03, 2015 4:44 PM  
**To:** Crooks, Jennifer  
**Cc:** Poy, Thomas; Harris, Kimberly; Schock, Michael; Porter, Andrea  
**Subject:** Re: Lead levels and Chloramine

## Ex. 5 - Deliberative Process

Miguel A. Del Toral

Regulations Manager  
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**From:** Crooks, Jennifer  
**Sent:** Thursday, April 2, 2015 09:13 AM  
**To:** Deltoral, Miguel  
**Cc:** Poy, Thomas; Harris, Kimberly  
**Subject:** Lead levels and Chloramine

## Ex. 5 - Deliberative Process

## Ex. 5 - Deliberative Process

“Changes in water treatment and disinfection practices can substantially undermine lead corrosion control (60). In the mid-1990s in the District of Columbia (DC), high levels of free chlorine were used to decrease coliform bacteria in water, a process that inadvertently changed the type of lead mineral coating in the water lines to one with very low solubility in the background pH of the DC drinking water. When the free chlorine was replaced with chloramines, the transformed highly insoluble lead scale minerals were no longer stable and dissolved. Therefore, a substantial level of lead was released from the lead service lines into drinking water at the tap (61). CDC reviewed the relationship between BLLs in children, the presence of a lead service line, and water disinfection practices in DC during 1998–2006 (62). The study reported that the presence of a lead service line was associated with higher BLLs in children. This relationship was most pronounced during 2001 through June 2004, when chloramines were used to disinfect the drinking water without adequate corrosion control (62). An observational study in which the BLLs of children were matched to population-based data of water lead levels during periods when water disinfection practices changed in DC concluded that the increase in water lead levels was associated with an increase in the BLLs of children (63). In a study in Wayne County, North Carolina, a unified geographic information system was used to link BLLs with water service lines made with or without lead. The use of chloramines in water predicted higher water lead levels and BLLs, controlling for well-established, known predictors of BLL (44).”

**From:** Ex. 6 - Personal Privacy [redacted]@gmail.com]  
**Sent:** Wednesday, April 01, 2015 10:23 PM  
**To:** Crooks, Jennifer  
**Subject:** Lead and Chloramine

Ms. Crooks,

I know I already sent you an email but during further research I discovered this. I thought it was something that should be seen with the recent recommendations of Chloramine possibly being added as a solution.

[http://www.cdc.gov/mmwr/preview/mmwrhtml/su6104a1.htm?s\\_cid=su6104a1\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/su6104a1.htm?s_cid=su6104a1_w)

LCR And Control Measures Sections, 4th paragraph down. This is my concern with the new chemicals the city wants approval for. What happens to the other citizens who do not know they have an elevated lead content or for the ones who have already tested with elevated levels? I know one of the other levels was 37, that was the highest the city had seen before my levels,

what will it look like when Chloramine is added?

Thank you

**Ex. 6 - Personal Privacy**